DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

ADDENDUM TO INITIAL STATEMENT OF REASONS

TITLE 13, CALIFORNIA CODE OF REGULATIONS,
DIVISION 2, CHAPTER 4, ADD ARTICLE 13, TIRE TRACTION DEVICES,
SECTIONS 1070-1074

Tire Traction Devices
(CHP-R-2014-03)

(OAL File No. 2017-1221-02S)

PROBLEM STATEMENT

California motorists often encounter tire traction control (or "chain control") conditions when it is snowing in the mountain regions. Pursuant to California Streets and Highways Code (CSHC) Section 124, California Department of Transportation (Caltrans) may restrict the use of, or close, any state highway whenever Caltrans considers such closing or restriction necessary for the protection of the public. In accordance with the provisions of Section 124 CSHC, based on winter roadway conditions, Caltrans establishes chain controls and has identified three different requirement levels for tire traction control. These three levels are:

• Requirement One (R-1): Chains are required on all vehicles, except passenger vehicles and light-duty trucks under 6,000 pounds (lbs.) gross weight, and equipped with snow tires, having a minimum of 6/32 inches of tread depth and MS, M/S, M+S, or the words MUD AND SNOW or a "mountain/snowflake" marking on the tire sidewall, on at least two drive wheels. Chains must be carried by vehicles using snow tires. All vehicles towing trailers must have chains on one drive axle. Trailers with brakes must have chains on at least one axle.

• Requirement Two (R-2): Chains or traction devices are required on all vehicles except four-wheel/all-wheel drive vehicles with snow-tread tires on all four wheels.
NOTE: (Four-wheel/all-wheel drive vehicles must carry tire traction devices in chain control areas).

• Requirement Three (R-3): Chains are required on all vehicles, no exceptions.

The R-1 and R-2 are the most common chain controls in California as the roads are usually closed before the R-3 chain control is imposed.

The California Highway Patrol (CHP), partnering with Caltrans and local law enforcement, has a need to ensure the safety of motorists by enforcing tire traction control statutes.

California Vehicle Code (CVC) Section 27459 states the following: *No person shall operate any motor vehicle, trailer or semitrailer upon any portion of a highway without tire traction devices when that portion of the highway is signed for the requirement of tire traction devices. In any case where a passenger vehicle or motortruck having an unladen weight of 6,000 pounds or less may be required by the Department of Transportation or local authorities to be equipped with tire traction devices, the devices shall be placed on at least two drive wheels, or the department or local authorities may provide, in the alternative, that the vehicle may be equipped with snow-tread tires on at least two drive wheels when the weather and surface conditions at the time are such that the stopping, tractive, and cornering abilities of the snow-tread tires are adequate. The snow-tread tires shall be of a type and design manufactured for use on snow as a replacement for tire chains or tire traction devices, shall be in good condition, and shall bear the marking of M-S, M/S, or other marking indicating that the tire was manufactured for use on snow, or, in the case of tires purchased before January 1, 1987, shall either bear the markings or, in the opinion of the inspecting officer, comply with the tread pattern requirements of Section 558.*

Section 605 CVC defines tire traction devices as follows: *"Tire traction devices" are devices or mechanisms having a composition and design capable of improving vehicle traction, braking, and cornering ability upon snow or ice-covered surfaces. Tire traction devices shall be constructed and assembled to provide sufficient structural integrity and to prevent accidental detachment from vehicles. Tire traction devices shall, at the time of manufacture or final assembly, bear a permanent impression indicating the name, initials, or trademark of the assembling company or primary manufacturer, and the country in which the devices were manufactured or assembled in final form.*

According to Section 605 CVC, CHP and Caltrans must allow any tire traction device that complies with the CVC to be used on California roads. In order to ensure the safety of all motorists on California roads, the chain control inspection stations and checkpoints are tasked to inspect not only if vehicles are complying with the traction control requirements, but if they are safe to use on the highway. Tire chains and tire cables are the most common types of tire traction devices, and have proven to be an effective tool for improving vehicle traction in inclement weather conditions and meet the specification requirements found in Section 605 CVC. However, in recent years, new innovative design concepts for tire traction devices, such as cloth and plastic based devices, have been created and marketed throughout the United States and other countries. In many cases, these new unconventional devices are dramatically different in appearance from traditional metal chains and cables. The unconventionality of these devices has raised questions and concerns as to whether the devices are capable of improving vehicle traction, braking, and cornering ability upon snow and ice-covered surfaces as specified by Section 605 CVC. This has led to confusion from both the public and law enforcement as to whether these new alternative traction devices (ATDs) can be utilized safely on California highways.

This confusion prompted the CHP and Caltrans Division of Maintenance to request assistance from Caltrans Division of Research, Innovation and System Information (DRISI) in gaining a better understanding of these new tire traction technologies. The DRISI responded by completing both a tire traction control device durability study (Report Number: CA16-2944) and a traction control device evaluation study (Report Number: CA16-2732). Based on the findings

of these studies, DRISI recommended the CHP consider adopting similar criteria to what Washington State has adopted regarding the use of tire traction devices on their roadways. At this time, California does not have regulations in place which establish standards and specifications for tire traction devices and, more specifically, ATDs, nor the specific placement of the tire traction devices on a vehicle in order to be compliant with statute. In the absence of statutory language or regulation which further interprets, specifies, and clarifies the application of tire traction devices required to comply with Sections 605 and 27459 CVC, the CHP and Caltrans have relied on institutional experience and past practices to enforce the statutory requirements.

PURPOSE AND NECESSITY OF REGULATIONS

Section 2402 CVC authorizes the Commissioner of the California Highway Patrol to make and enforce regulations as necessary to carry out the duties of the CHP. Section 26103 CVC, authorizes the CHP to adopt and enforce regulations establishing standards and specifications for tire traction devices. The CHP proposes to add Sections 1070 through 1074 to Title 13 of the California Code of Regulations (CCR). It is necessary to add Section 1070 through 1074 to the CCR to promote the safe operation of motor vehicles during inclement weather. This is accomplished by providing guidance and uniformity to known types of tire traction devices, determining placement of tire traction devices, and ensuring tire traction devices have been tested to meet certain performance standards. Additionally, this rulemaking provides the opportunity for other new tire traction device technologies to compete with existing tire traction devices without compromising the safety of the motoring public.

SECTION BY SECTION OVERVIEW

Title 13 CCR, Division 2, Chapter 4, Tire Traction Devices.

§1070. Scope. The provisions of this article shall apply to tire traction devices, defined in Section 605 CVC. The provisions require tire traction devices to meet specified published testing certifications and to be tested according to those standards identified in this article, prior to being used on motor vehicles when required by Section 27459 CVC during snow, ice, and other weather and highway conditions.

§1071. Definitions.

Subsection (a) is added to define an ATD and provide examples to clarify how varied tire traction devices may be included in the definition as an ATD for the purpose of ensuring consistency in the applicability of these regulations and provide for how they differ from a "tire chain." This section serves to clarify what may be considered an ATD.

Subsection (b) is added to define an automatic tire chain. This is necessary to specify what an automatic tire chain is comprised of, and may be referred to as, in order to aid both industry and law enforcement in determining the applicability of these regulations.

Subsection (c) is added to provide the definition of a snow-tread tire, which is defined in Section 558 CVC. Proposed subsection (c) provides identification markings used by the tire industry and referred to in the Caltrans R-1 and R-2 conditions convention, which are available to the public on their Web site to assist the public, industry, and law enforcement with identifying snow-tread tires. This definition is included in order to aid the public, industry, and law enforcement in determining the applicability of these regulations.

Subsection (d) is added to provide the definition of a studded tire, which is defined in Section 27454(e)(1) CVC. This definition is included in order to aid both industry and law enforcement in determining the applicability of these regulations.

Subsection (e) is added to define textile traction devices. This definition is necessary to specify what textile traction devices are comprised of, and is included in order to aid both industry and law enforcement in determining the applicability of these regulations.

Subsection (f) is added to define tire cables. This definition is necessary to specify what tire cables are comprised of, and may be alternatively referred to, in order to aid both industry and law enforcement in determining the applicability of these regulations.

Subsection (g) is added to define tire chains. This subsection is especially important in that these devices may be specifically prescribed to meet the requirements of this article under certain conditions as determined by members of Caltrans or CHP. Additionally, this is necessary to specify what tire chains are comprised of, and how the devices may be referred to, in order to aid both industry and law enforcement in determining the applicability of these regulations.

Subsection (h) is added to identify which devices are and are not tire traction devices. The ATDs, automatic tire chains, textile traction devices, tire cables, tire chains, and wheel-hub attached chains are considered tire traction devices because they are recognized as providing enhanced traction and control to the operation of vehicles in snow and ice conditions and may be readily installed or removed as needed. Snow-tread and studded tires are not considered tire traction devices, as defined in Section 605 CVC, as they are not typically capable of being installed or removed in a roadside situation, and do not meet traction testing standards of a tire chain or ATD.

Subsection (i) is added to define wheel-hub attached chains. This is necessary to specify what tire chains are comprised of, in order to aid both industry and law enforcement in determining the applicability of these regulations, and also clarifies these devices attach to the rim of a wheel.

§1072. General Application. This section provides the minimum requirements for installation of tire traction devices, when Caltrans or local authorities have placed official traffic control signs requiring the use of chains as provided by Section 27459 CVC, due to inclement weather and roadway conditions. Tires located on a motor vehicle's drive axle(s) shall provide traction necessary to propel and control the vehicle. If, in inclement weather and highway conditions, a motor vehicle's drive axle tires need to maintain traction and provide the vehicle a means of control with the roadway surface, there is a necessity for tire traction devices being placed on the motor vehicle's drive axle(s) and on a trailer(s) brake axle(s), when in combination and such devices to be located at the most suitable placement for maximum effect and safety. The

requirement for tire traction devices to be placed on tires of the same drive axle(s) is consistent with the requirements found in Section 27459 CVC and is consistent with the Caltrans Chain Requirements chart, which is available to the public on their Web site.

Subsection (a) is proposed to be applicable for vehicles under 10,000 lbs., including vehicles with all-wheel drive and four-wheel drive, and housecars, regardless of weight. Subsection (a)(1) is proposed to require tire traction devices on at least two tires of the drive axle and on all-wheel drive and four-wheel drive vehicles at least two tires of one drive axle. Subsection (a)(2) is proposed to require tire traction devices on at least two of the tires of the drive axle of a vehicle when towing another vehicle, including a semitrailer or trailer. The devices shall be installed on at least two tires of the rear-most axle of a trailer equipped with brakes, and at least two tires of a semitrailer axle equipped with brakes. These requirements are necessary to ensure vehicles travelling in adverse conditions utilize tire traction devices on the tires of the drive axles of a motor vehicle and the tires of a trailer axle equipped with brakes for stability and control purposes.

Subsection (b) is proposed to be applicable for buses. Subsections (b)(1) and (2) are proposed to require tire traction devices on at least two of the tires of the drive axle of a two axle bus and at least two tires of the drive axle of a three axle bus. In addition, if the bus is articulated, subsection (b)(3) is proposed to require tire traction devices on at least two of the tires of the drive axle and on at least two tires of the rear-most axle, of a three axle bus. These requirements will ensure buses and articulated buses operating in inclement weather apply tire traction devices to the tires of the appropriate drive axle and the rear-most axle of articulated buses, in the interest of passenger safety and in support of consistent law enforcement efforts. These provisions are consistent with the Caltrans Chain Requirements chart.

Subsection (c) is proposed to be applicable for vehicles over 10,000 lbs. Subsection (c)(1) is proposed to require tire traction devices on at least two of the tires of a drive axle of a pickup truck. Subsection (c)(2) is proposed to require tire traction devices on at least two of the tires of the drive axle of a two axle motor truck. Subsection (c)(3) is proposed to require tire traction devices on at least four of the tires of the drive axle(s), of a three axle motor truck. Subsection (c)(4) is proposed to require tire traction devices on at least four of the tires of the drive axle(s), of a two axle or three axle truck tractor. These requirements are deemed necessary by the CHP to improve traction and safety and to clarify the location placement of tire traction devices on regulated vehicles, as described by Section 34500 CVC and as referenced in the Caltrans Chain Requirements chart.

Subsection (d) is proposed to be applicable for combinations of vehicles over 10,000 lbs. Subsection (d)(1) is proposed to require tire traction devices on at least four of the tires of the drive axle(s) of a two axle or three axle truck tractor, and on at least two tires of one axle of the semitrailer. Subsection (d)(2) is proposed to require tire traction devices on at least four tires of the drive axle of a two axle truck tractor, on at least two tires of one axle of a semitrailer, and on at least two tires of the rear-most axle of a trailer. Subparagraph (d)(2)(A) is proposed to allow the restriction of specific single drive two axle truck tractor/semitrailer/trailer combinations which are recognized to have reduced traction due to drive axle configuration in chain control conditions. Subsection (d)(3) is proposed to require tire traction devices be installed on at least four tires of the forward drive axle of a three axle truck tractor and at least two tires of the rear-

most drive axle, and, when the truck tractor is equipped with only two tires per axle, all four tires on both drive axles. Tire traction devices shall also be installed on at least two tires of one axle of a semitrailer, and on at least two tires of the rear-most axle of a trailer. Subparagraph (d)(3)(A) is proposed to allow the restriction of single drive three axle truck tractor/semitrailer/trailer vehicle combinations which are recognized to have reduced traction due to drive axle configuration in chain control conditions. Subsection (d)(4) is proposed to require tire traction devices be installed on at least two tires of the drive axle of a two axle motor truck, and at least two tires on the forward drive axle and at least two tires of the rear drive axle of a three axle motor truck. When the three axle motor truck is equipped with only two tires per drive axle, all four tires on both drive axles shall have tire traction devices installed. Tire traction devices shall also be installed on at least two tires of the rear-most axle of a trailer. These requirements are deemed necessary by the CHP to clarify the required locations of tire traction devices on regulated vehicles, as described by Section 34500 CVC and as referenced in the Caltrans Chain Requirements chart.

Subsection (e) is proposed to require that tire traction devices be installed on wheeled machinery commonly used for snow removal and which is frequently driven on highways during chain control conditions. This subsection is necessary to clarify and provide additional examples of what types of "motor vehicles" are required to have tire traction devices installed per Section 27459 CVC. Subsection (e)(1) designates the minimum tire traction device requirement of at least two tires of at least one drive axle for wheeled machinery, regardless of weight, and provides the public, industry, and law enforcement personnel with a better understanding of the need to require tire traction devices on other types of motor vehicles, in the interest of safety and control of wheeled machinery when operating on public highways during chain control conditions.

Subsection (f) is proposed to require that tire traction devices be installed on opposite sides of the same axle to prevent the interpretation that the minimum number of prescribed tire traction devices shall be installed on tires on the same side of an axle or vehicle. This section clarifies the intent that installing the tire traction devices on opposite sides of the same axle provides the safest and most effective means of the application of tire traction devices for the purpose of this article.

Subsection (g) is proposed to require additional or specific types of tire traction devices be installed on tires when severe weather and highway conditions warrant. This subsection is necessary to clarify when additional tire traction devices are required to be installed on tires, and includes the ability to specify the type, number, and position of tire traction devices determined to be most effective when a specific type of tire traction device or the installation of additional tire traction devices will be the most effective during severe local weather and highway conditions for adequate stopping, traction, and cornering.

Subsection (h) is proposed to prohibit any vehicle from entering a designated chain control area, as authorized by Section 27459 CVC, when tire traction devices do not meet the requirements of this article or are not present with the vehicle when weather and highway conditions warrant. This subsection is necessary to clarify when any vehicle not equipped as required by this article may enter a designated chain control area. Subsection (h)(1) is proposed to exempt certain

government vehicles, authorized emergency vehicles, or snow removal equipment from the requirements of this article due to exigent or emergency conditions.

§1073. Tire Chain Requirements. This proposal requires tire chains to meet the requirements established by the National Association of Chain Manufacturers (NACM), and is contained in the Tire Chain Specifications, NACM 92805 (TC) for ladder-type passenger, truck, and off-highway vehicles for regular and reinforced welded metal tire chain assemblies for single and dual tires.

Subsection (a) proposes that tire chains meet the design, construction, and testing requirements of the Tire Chain Specifications, NACM 92805 (TC). The NACM was chosen by the CHP because it is recognized as one of the oldest industrial trade associations in the United States and provides specifications to a wide array of other American industries. The NACM maintains an interface with several federal agencies which include: Department of Labor, Occupational Safety and Health Administration (OSHA); United States Department of Transportation (US DOT), Federal Motor Carrier Safety Administration (FMCSA); and the Defense Logistics Agency. The NACM, *"Tire Chain Specifications, NACM 92805(TC)"* is known as the "industry standard" for tire chain manufacturers. These requirements have been determined by the CHP to be the industry standard and are necessary to support law enforcement efforts related to tire chains. In addition, all vehicles used in testing must be certified, by their manufacturer, as being compliant with the Federal Motor Vehicle Safety Standards (FMVSS) and the tires used in testing must be US DOT approved.

Subsection (b) proposes to incorporate by reference the Tire Chain Specifications NACM, 92805 (TC) Standard, published on September 28, 2005, for the purpose of assisting the public, industry, and law enforcement in determining what constitutes a compliant tire traction device per Section 605 CVC as required by Section 27459.5 CVC.

Subsection (c) provides the public with information for where the Tire Chain Specifications NACM, 92805 (TC) Standard may be obtained.

Colorado, Nevada, Oregon, and Washington State have regulations in place which provide guidance to tire traction device manufacturers, the public, industry, and law enforcement with regard to what specifications must be met in order to qualify as an approved tire traction device. After carefully considering the requirements adopted by other states, the CHP proposes that a testing standard be incorporated by reference so that manufacturers of new tire traction technologies may introduce those technologies. Upon meeting the prescribed standard, the tire traction device shall be recognized by California as compliant with Section 605 CVC. The adoption of this section will help eliminate tire traction device compliance issues, which currently rely on a subjective variable standard applied by Caltrans and law enforcement personnel on highway.

§1074. Alternative Tire Traction Device Requirements. This proposal outlines the requirements that ATDs must meet for use in California. These requirements have been determined by the CHP to be the best standard of testing for ATDs and provide the opportunity for new tire traction device technologies to compete with other tire traction devices without

compromising safety to the motoring public, and necessary to meet the statutory requirements of Section 605 CVC.

A prescribed standard is necessary to provide manufacturers, the public, industry, and law enforcement with regard to what specifications must be met in order to qualify as an approved tire traction device pursuant to Section 605 CVC. Therefore, the CHP proposes that a testing standard be incorporated by reference. The adoption of this section will help eliminate tire traction device compliance issues, which currently rely on a subjective variable standard applied by Caltrans and law enforcement personnel on highway.

Subsection (a) proposes to require ATDs to be tested in accordance with the standard published by Austrian Standards Institute (Önorm V5119), on vehicles which are certified, by their manufacturer, as being compliant with the FMVSS. This standard was selected since it is the only recognized standard for tire traction devices. It will ensure newly developed tire traction devices will perform equal to or greater than tire chains and tire cables. Additionally, this proposal requires the tires used in testing to be US DOT approved. Subsection (a)(1) proposes to specify requirements for vehicles under 10,000 lbs. and housecars regardless of weight. Subsection (a)(1)(A) requires the traction devices be installed on at least two tires of the drive axle, of a two axle vehicle. Subsection (a)(1)(B) proposes to include the following tests: (i) Durability testing of the product on dry and wet roadway; (ii) Acceleration on snow and ice; (iii) Deceleration on snow and ice; (iv) Traction force of the product on snow; and (v) Be compared to tire chains or tire cables when tested using the same standard to show the ATD meets or exceeds the standard as compared to the results of the tire chain or the tire cable for traction, braking, and cornering ability on snow and ice covered surfaces. These requirements are necessary to ensure the ATDs are meeting similar performance standards to tire chains and tire cables and allow ATDs to be considered acceptable for use in chain control areas, equally to tire chains and tire cables. Subsection (a)(2) proposes to specify requirements for vehicles and combinations over 10,000 lbs. Subsection (a)(2)(A) requires the traction devices be installed on at least two tires of the drive axle, of a two axle motor truck. Subsection (a)(2)(B) requires the traction devices be installed on at least four tires of the drive axles, of a three axle motor truck. Subsection (a)(2)(C) requires the traction devices be installed on at least four tires of the drive axle(s), of two axle and three axle truck tractors. Subsection (a)(2)(D) requires the traction devices be installed on at least two tires of at least one axle, of a semitrailer. Subsection (a)(2)(E) requires the traction devices be installed on at least two tires of the rear-most axle, of a trailer. Subsection (a)(2)(F) requires the traction devices be installed on at least two tires of the drive axle, of a two axle bus. Subsection (a)(2)(G) requires the traction devices be installed on at least two tires of the drive axle, of a three axle bus. Subsection (a)(2)(H) proposes to include the following tests: (i) Durability testing of the product on dry and wet roadway;
(ii) Acceleration on snow and ice; (iii) Deceleration on snow and ice; (iv) Traction force of the product on snow; and (v) Be compared to a tire chain or tire cable when tested using the same standard to show the ATD meets or exceeds the standard as compared to the results of a tire chain or tire cable for traction, braking, and cornering ability on snow and ice covered surfaces. These subsections are necessary to ensure the ATDs meet minimum requirements for application and functionality proposed by this article and allow ATDs to be considered acceptable for use in chain control areas, equally to tire chains and tire cables.

Subsection (b) proposes to require ATDs to be installed on at least two tires at opposite sides of the same axle. This subsection is proposed to require that ATDs be installed on opposite sides of the same axle to prevent the interpretation that the minimum number of prescribed tire traction devices may be installed on tires on the same side of an axle or vehicle. This section clarifies the intent that installing the tire traction devices on opposite sides of the same axle provides the safest and most effective means of the application of ATDs and where the devices should be installed for the purpose of testing.

Subsection (c) proposes to require ATDs to function compatibly with any given electronic driving support such as the Anti-locking Braking System, Electronic Stability Control, and Traction Control Systems. These requirements are necessary to ensure the ATDs do not conflict or interfere with the additional safety features of the vehicle.

Subsection (d) proposes to require ATDs to be resistant to ultraviolet light, corrosion, water, fuels, spreading salts, cinders, sand, salt brine, and alcohols which may be used to aid in clearing the roadway. This is necessary to ensure the ATD withstands premature wear and do not degrade prior to its suggested lifecycle when exposed to common external elements used to mitigate snow and ice on affected highways.

Subsection (e) proposes the ATDs and packaging thereof must be marked or labeled in accordance with the specifications provided by the Önorm V5119 Standard. This is necessary to provide a method for the public, industry, and law enforcement to identify that the ATD complies with Section 26104 CVC. This subsection also provides an example of the Önorm marking symbol to assist the public, industry, and law enforcement recognition of the marking.

Subsection (f) proposes to require the following documentation to be provided to the CHP, upon request: (f)(1) The testing standard used, in English; (f)(2) Documentation of the testing results, which must include the data produced for each test comparing the ATD to the referenced tire chain or tire cable. Durability testing is not required to be provided for the referenced tire chain or tire cable; (f)(3) A certified statement from the manufacturer outlining what measurable indicator of wear can be used by law enforcement to indicate when the product will no longer provide adequate traction equivalent to a tire chain or tire cable; (f)(4) Documentation that the tests were conducted according to the Önorm V5119 Standard; and (f)(5) Provide manufacturer certification of the test results, which must contain the following statement, "I certify that the test methods, conditions, and results reported are accurate and complete," and bear the signature of the person or persons who conducted the testing. The documentation requirements are necessary to ensure an ATD has complied with the Önorm V5119 Standard testing procedure. These proposed provisions provide parameters for documentation to be provided to the CHP upon request in confirming an ATD has been certified for use.

Subsection (g) proposes that CHP may suspend the use of a device, without prior notification, if found to be a danger to public health, safety, or welfare which requires immediate action. This proposed subsection provides a mechanism which allows the CHP to prevent a device which may present a hazard to the public to be withdrawn from use for the purpose of this article.

Subsection (h) proposes to incorporate by reference the Önorm V5119 Standard published May 1, 2008 (with the exception that the results of initial type testing report, which is

documented in the German language). The CHP requires the testing standard used to be documented in the English language as specified by subsection (f)(1). This proposed subsection is necessary to affirm the process by which an ATD may be certified to meet the requirements of Section 26104 CVC.

Subsection (i) provides the public with information on where the Önorm V5119 Standard may be obtained. This proposed subsection provides information to the public and industry of where the referenced document may be examined or obtained for review.

DOCUMENTS INCORPORATED BY REFERENCE:

The CHP has determined it would be cumbersome, unduly expensive, or otherwise impractical to publish the Tire Chain Specifications NACM, 92805 (TC) Standard, published September 28, 2005, and the Önorm V5119 Standard, published May 1, 2008, within the CCRs.

The documents listed below lend support or are otherwise related to this proposed rulemaking. Copies of these documents, or relevant portions thereof, can be obtained from the CHP by calling the Commercial Vehicle Section (CVS) at (916) 843-3400, 1-800-735-2929 (TT/TDD), 1-800-735-2922 (Voice), or via facsimile at (916) 322-3154. The rulemaking file is available for inspection at CHP, CVS, 601 North 7th Street, Sacramento, CA 95811. Interested parties are advised to call for an appointment.

- National Association of Chain Manufacturers "Tire Chain Specifications, Number NACM 92805 (TC)," published September 28, 2005.

- The Austrian Standards Institute Önorm V5119 Standard, published May 1, 2008.

DOCUMENTS RELIED UPON:

- The Department of Transportation's Division of Research, Innovation and System Information's "Tire Traction Control Device Durability Study" (October 2015).

- The Department of Transportation's Division of Research, Innovation and System Information's "Evaluation of Devices for Improving Traction Control in Winter Conditions" (July 2016).

- State of California Department of Transportation "Chain Requirements" Chain Installation Chart (revised October 2016)

Copies of the Tire Chain Specifications NACM, 92805 (TC) Standard, published September 28, 2005, are made available to the public through the National Association of Chain Manufacturers Web site at www.nacm.info/specifications/tire-chain-specifications/ and for requests by mail: National Association of Chain Manufacturers, P.O. Box 89014, Tucson, AZ 85752-9014. The National Association of Chain Manufacturers telephone number is (248) 994-2222 and electronic mail (e-mail) address is NACMoffice@nacm.info.

Copies of the Önorm V5119 Standard, published May 1, 2008, are made available to the public through the Austrian Standards Institute Web site at www.on-norm.at/shop and for requests by mail: Austrian Standards Institute, Heinestrasse 38, 1020 Vienna, Austria.
The Austrian Standards Institute telephone number is (+43 1) 213 00-805 and email address is sales@on-norm.at.

Copies of the Önorm V5119 Standard, published May 1, 2008, are made available to the public through the American National Standards Institute Web site at www.ansi.org and for requests by mail: American National Standards Institute, Attn: Customer Service Department, 25 West 43rd Street, 4th Floor, New York, NY 10036. The American National Standards Institute telephone number is (212) 642-4980 and email address is info@ansi.org.

Performance vs. Prescriptive Standard

In adopting the purposed regulations, the CHP considered the incorporation of a performance standard into regulation, however, a performance standard was deemed insufficient due to the broad interpretations of Section 605 CVC. Various interpretations of what constitutes a tire traction device, as well as where a tire traction device may be installed for the safest and most effective benefit of supplementing tire traction and vehicle control in poor weather or highway conditions has been, in many cases left to individual decision, institutional knowledge, and past practice. Due to the critical safety function tire traction devices provide to motor vehicles while traversing highways during inclement weather, it is necessary to apply prescriptive standards, which are clearly defined, regarding what constitutes an accepted tire traction device and the minimum placement of tire traction devices on specific tires of a vehicle for various vehicle configurations. Misapplication or under application of tire traction devices on a given vehicle configuration could lead to ineffective performance, a collision, and possible injury or death. These prescriptive standards are based on the NACM 92805 (TC) and Önorm V5119 standards, and the Caltrans Chain Requirements Chart, revised in October 2016. The Chain Requirements Installation Chart is meant to depict the proper placement of tire traction devices for all vehicles entering California highways restricted by chain controls. Members of CHP and Caltrans may utilize these standards and the Chain Requirements Chart to apply uniform enforcement of Section 27459 CVC and to guide and advise the public and industry of effective and acceptable installation of tire traction devices meeting these standards on specific tires for various configurations of vehicles. This chart has been in use for this purpose since November 1999. This chart is available publicly on the Caltrans Web site at:
http://www.dot.ca.gov/hq/roadinfo/ChainRequire.pdf